

CLAIMS

What is claimed is:

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1. An irrigation system comprising:
each of an irrigation controller and a water application device physically situated at a user's location, the controller at least partially controlling the water application device;
a distal computer remote from the user location;
a first communication system that exchanges information between the irrigation controller and the distal computer;
10 a second communication system that exchanges information between the irrigation controller and the user;
a third communication system that exchanges information between the user and the distal computer; and
15 a fourth communication system that exchanges information between the distal computer and a third party.
2. The irrigation system of claim 1, wherein the exchange of information between each of the irrigation controller and the distal computer, the irrigation controller and the user, the user and the distal computer; and the distal computer and a third party, are bi-directional.
- 20 3. The irrigation system of claim 1, further comprising a microprocessor disposed in the irrigation controller, that facilitates the exchange of information between the irrigation controller and the distal computer.
4. The irrigation system of claim 1, further comprising a microprocessor disposed in a second unit separate from the irrigation controller, that facilitates the exchange of
25 information between the irrigation controller and the distal computer.
5. The irrigation system of claim 1, further comprising a storage device that stores data at the user location.
6. The irrigation system of claim 1, wherein at least one of the first, third, and fourth communication systems comprises a public, packet switched network.
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7. The irrigation system of claim 1 wherein the first communication system comprises a two-way pager.
8. The irrigation system of claim 1 wherein the first communication system comprises a web page interface.
- 5 9. The irrigation system of claim 1, wherein the second communication system comprises a dedicated link between the controller and a personal computer.
10. A method of operating an irrigation system comprising:
physically situating each of an irrigation controller and a water application device at a user's location;
10 utilizing the controller to at least partially control the water application device;
coupling the irrigation controller and a distal computer using a first communication system;
coupling the irrigation controller and the user using a second communication system;
the user entering landscape irrigation operating information into the irrigation controller
15 using the second communication system; and
the irrigation controller causing at least a portion of the landscape irrigation operating information to be transmitted to the distal computer using the first communication system.
11. The method of claim 10 wherein the step of entering the landscape irrigation operating
20 information comprises the user entering the landscape irrigation operating information into a personal computer, and the personal computer transmitting the information to the irrigation controller via the second communication system.
12. The method of claim 10, further comprising:
providing the controller with a microprocessor programmed to receive additional
25 information from the distal computer via the first communication system; and
the microprocessor determining an irrigation schedule based at least in part on the landscape irrigation operating information from the user, and the additional information from the distal computer.

13. The method of claim 12, further comprising:
providing the controller with local water usage data; and
the microprocessor determining an irrigation schedule based at least in part on the water
usage data.
- 5 14. The method of claim 13 wherein the step of determining an irrigation schedule further
includes the microprocessor computing a desired quantity of water to be applied to a
landscape at the user's location for a specific period of time.
15. The method of claim 14 wherein the period of time is at least one day.
- 10 16. The method of claim 13 wherein the additional information from the distal computer
includes weather data, and further comprising the microprocessor computing an ETo
value.
17. The method of claim 16 further comprising the microprocessor comparing the ETo value
to the desired quantity of water applied to the landscape.
18. The method of claim 13, wherein the water usage data includes water pressure data.
- 15 19. The method of claim 13, further comprising coupling the user and the distal computer
using a third communication system;
20. The method of claim 13, further comprising coupling the distal computer and a third
party using a fourth communication system.
- 20 21. The method of claim 13 further comprising the microprocessor sending a warning to the
user via the second communication system when an aspect of the irrigation system falls
outside of a predetermined parameter.
22. The method of claim 13 further comprising the microprocessor preventing an operation
of the irrigation system when the irrigation system falls outside of the predetermined
parameters.
- 25 23. The method of claim 13 wherein the information transmitted to the distal computer
comprises a calculated estimate of water actually applied at a station for a time period.

24. The method of claim 23 wherein the information transmitted to the distal computer further includes a relationship between the calculated estimate of water actually applied at a station for a time period, and a computed ETo for the station for the time period.

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